Takahiro (Taka) Yabe

Master's Course Student,

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Lab Address: 4-6-1 Komaba, Meguro-ku, Tokyo 153-8505, Japan

Date of Birth: 5th May, 1992 (24 years old)

Foreign Residence Experience: London, Great Britain (1998-2001); Calgary, Canada (2005-2008)

Research Interests

- Behavior modeling of people's post- disaster movement using mobile phone location data
- Modelling urban disaster resilience using geospatial big data

Degree

- **Bachelor of Engineering**, Faculty of Engineering, the University of Tokyo, Japan (March, 2015)

  Topic: ***"Real-Time Urban Scale Movement Predictions after Disasters using Mobile Phone Location Data"***

- **Master of Engineering**, Graduate School of Engineering, the University of Tokyo, Japan (expected in 2017.3)

Publications

Journals:

- Sudo, A., Kashiyama, T., **Yabe, T.**, Kanasugi, H., Sekimoto, Y., Earthquake Victim Distribution Estimation using Filtering Approach, Journal of Disaster Research, Vol.11 No.2, pp. 217-224, 2016
- **Yabe, T.**, Sekimoto, Y., Kashiyama, T., Kanasugi, H., Sudo, A., Real time movement prediction after natural disasters using data assimilation, Journal of Transportation Engineering, Japanese Society of Transportation Engineering, Vol. 2 No. 2, pp. 19-27, 2016 *(in Japanese)*

Conferences:

- **Yabe, T.**, Tsubouchi, K., Sudo, A., Sekimoto, Y., A Framework for Evacuation Hotspot Detection after Large Scale Disasters using Location Data from Smartphones: Case Study of Kumamoto Earthquake, Proceedings of the 22nd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. ACM, 2016. (**Acceptance rate = 18%**)
- **Yabe, T.**, Tsubouchi, K., Sudo, A., Sekimoto, Y., Predicting Irregular Individual Movement following Frequent Mid-Level Disasters using Location Data from Smartphones, Proceedings of the 22nd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. ACM, 2016. (**Acceptance rate = 18%**)
- Sudo, A., Kashiyama, T., **Yabe, T**., Kanasugi, H., Song, X., Higuchi, T., Nakano, S., Saito, M., Sekimoto, Y., Particle Filter for Real-time Human Mobility Prediction following Unprecedented Disaster, Proceedings of the 22nd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. ACM, 2016. (**Acceptance rate = 18%**)

- **Yabe, T.**, Tsubouchi, K., Sudo, A., Sekimoto, Y., Estimating Evacuation Hotspots using GPS data: What happened after the large earthquakes in Kumamoto, Japan?, 5th International Workshop on Urban Computing, ACM KDD, San Francisco, USA, 2016. 8. 14.
- **Yabe, T.**, Sekimoto, Y., Kanasugi, Y., Kashiyama, T., Making Real-Time Predictions of People's Irregular Movement in a Metropolitan Scale under Disaster Situations, 14th International Conference on Computers in Urban Planning and Urban Management, Boston, USA, 2015. 7. 7-10.
- + 5 conference papers (1st author) in Japanese conferences, mainly in GIS and Transportation domains.

Patents:
- Software and method for mobility prediction, Sudo, A., Kashiyama, T., Sekimoto, Y., **Yabe, T.**, 2015. 9. 7 (in Japan)

Awards/Grants

- **Best Presentation Award**, 25th Annual Conference of GIS, Geographical Information Systems Association of Japan, 2016.

- **Best Application Award**, Data & Science Department, Yahoo! Japan, 2016.

- **Research Fellowship for Young Scientists** (total of $72000, $2000 grant per month x 3 years), Japan Society for the Promotion of Science, 2016.

- **Doctoral Student Pre-Special Incentive Grant** (total of $3000, $500 grant per month x 6 months), Graduate School of Engineering, The University of Tokyo, 2016.

- **"Musha Shugyo (= Overseas Research)" Grant** ($4000), Graduate School of Engineering, The University of Tokyo, 2016.

Skills

- Fluent English (TOEFL iBT 117/120), have lived in Britain and Canada for a total of 7 years.
- Machine learning knowledge (please see my past research)
- Programming Skills of Java, Python, etc.
- GIS software techniques (QGIS, ArcGIS)
- 3 years of experience in large dataset analysis (GPS, CDR data)

Internships
- **Nomura Research Institute Internship** (Tokyo, Japan, Aug 15th- 25th 2014)
- **ICT Fieldwork in Nepal** (Kathmandu, Nepal, Sep 1st-12th 2014)
- **Science Po European Studies Program** (Paris, France, March 1st-31st, 2014)
- **Japan International Cooperation Agency Internship** (Philippines, Sep 1st- Oct 1st 2014)
- **Yahoo! Japan Internship** (Tokyo, Japan, July 1st-December 1st 2015)